CALFED Bay-Delta Program Project Information Form

Watershed Program - Full Proposal Cover Sheet

Attach to the cover of full proposal. All applicants must fill out this Information Form for their proposal. Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.

1.Full Proposal Title: **Engaging the Community**: Outreach & Education for the Sun Valley Watershed Retrofit Project
Concept Proposal Title/Number: (same) WSP01-0095
Applicant: The T.R.E.E.S. Project, a department of TreePeople
Applicant Name: Rebecca Drayse, T.R.E.E.S. Project Manager
Applicant Mailing Address: 12601 Mulholland Drive Beverly Hills, CA 90210
Applicant Phone: (818) 623-4867 Fax: (818) 753-4625 Email: rdrayse@treepeople.org
Fiscal Agent Name: (same) TreePeople is a 501(c)(3); Chief Operating Officer Richard Wegman
Fiscal Agent Mailing Address:_____
Fiscal Agent Telephone:_____ Fiscal Agent Fax:_____ Fiscal Agent Email:_____

2. Type of Project: Indicate the primary topic for which you are applying (check only one)

_____Assessment _____Monitoring
_____Capacity Building _____Outreach
__X_ Education _____Planning
_____Implementation _____Research

3. Type of Applicant:

_____Academic Institution/University __X_ Non-Profit
_____Federal Agency _____Private party
_____Joint Venture _____State Agency
_____Local Government _____Tribe or Tribal Government

4. Location (including County): Sun Valley watershed, NE San Fernando Valley, Los Angeles County

What major watershed is the project primarily located in:
_____Klamath River (Coast and Cascade Ranges)
_____Sacramento River (Coast, Cascade and Sierra Ranges)
_____San Joaquin River (Coast and Sierra Ranges)
_____Bay-Delta (Coast and Sierra Ranges)
__X_ Southern CA (Coast and Sierra Ranges)
_____Tulare Basin (Coast, Sierra and Tehachapi Ranges)

5. Amount of funding requested: $350,000
Cost share/in-kind partners? __X__Yes _____ No
Identify partners and amount contributed by each:

South Coast AQMD/City of LA Dep't of Water & Power $ 75,000
Los Angeles County Department of Public Works $475,000
(anticipated – *not* from Department's CALFED proposal)

6. Have you received funding from CALFED before? _____Yes __X_ No
If yes, identify project title and source of funds:

By signing below, the applicant declares the following:

1. The truthfulness of all representations in their proposal
2. The individual signing this form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or an organization)
3. The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the Watershed Program Proposal Solicitation Package and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in the Proposal Solicitation Package.

Rebecca Drayse
Printed name of applicant

_____
Signature of applicant

Engaging the Community:
Outreach & Education for the Sun Valley Watershed Retrofit Project

Think Regionally…
Question One: Project summary

Everything that any major American city used to develop itself, L.A. lacked. And, above all, it lacked water.

--Marc Reisner, *Cadillac Desert*

The story of Southern California is the story of water. Because they live, as Marc Reisner notes, in a "desert masquerading as a semi-arid ecosystem," 9.9 million Angelenos depend almost exclusively upon imported water. Perhaps befitting its area (4,081 sq. mi.) and population (nearly 30 percent of Californians live in Los Angeles County), the Los Angeles basin has one of the most complex water supply and delivery systems in the world, an octopus with tentacles extending to every imaginable source.

Only 15 percent of the City of Los Angeles' water supply comes from natural aquifers, while 75 percent, on average, is imported through two major aqueducts. The original Los Angeles Aqueduct carries water 338 miles through gravity-powered pipelines and ditches from the Owens Valley in the eastern Sierra Nevada; the Second Los Angeles Aqueduct, completed in 1970, taps the same watershed. Both systems are managed by the city's Department of Water and Power (DWP).

The city buys the other ten percent of its water from the Metropolitan Water District (MWD), a consortium of 14 cities, 12 municipal water authorities, and a county water authority. The MWD serves more than 130 cities and many unincorporated areas in Southern California.

MWD imports water from the Colorado River through a 300-mile aqueduct, and from Northern California through the massive State Water Project. Through the latter system, the Bay-Delta supplies most of the water consumed by 16 million Southern Californians and their $450 billion economy. This proposal addresses our desire to mitigate our region's impact on the water resources and ecological health of the Bay-Delta area, and our confidence that our work with the Sun Valley Watershed Stakeholders Group is an important step toward fulfilling that desire.

…Act Locally

The Sun Valley project area is a 2700-acre, 8,000-household, urban watershed located on an alluvial fan at the base of the Verdugo Mountains in Los Angeles County's northeast San Fernando Valley. This flat, dry, dusty, near-treeless community is part of the City of Los Angeles; two City Council members and a County supervisor represent its residents.

Given its low income (the poverty rate in local census tracts averages 25 percent), its ethnic composition (approximately 60 percent Hispanic, including many immigrants) and its traditionally low voter turnout, the area has historically failed to receive its share of infrastructure and services.

That failure is highlighted by the news media whenever Los Angeles has a major rainstorm. Television news editors routinely dispatch crews to shoot video in Sun Valley because the lack of storm drains turns the area's streets into waterways. The Verdugo Mountains are an outlier of the San Gabriel Mountains, which, as John McPhee notes in *The Control of Nature*, have received some of the most concentrated rainfall in the history of the United States, even though Los Angeles averages only 15 inches annually.

"In January, 1969, for example," McPhee writes, "more rain than New York City sees in a year fell in the San Gabriels in nine days. In January, 1943, twenty-six inches fell in twenty-four hours. In February, 1978… nearly an inch and a half of rain fell in twenty-five minutes. On April 5, 1926, a rain gauge in the San Gabriels collected one inch in one minute. … The storm cells are extremely compact, deluging typically about ten miles by ten. One inch of rain on a patch that size is seven million two hundred and thirty-two thousand tons of water."

Unfortunately, the Los Angeles River watershed is not engineered to capture this briefly abundant resource for local use. The Sun Valley sub-watershed is scarcely engineered at all. Instead, rain falls mostly on impervious surfaces, creating serious flood control challenges and eventually carrying a heavy pollutant load into storm drains and the ocean. These facts finally led the Los Angeles County Department of Public Works to plan a $42 million storm drain for Sun Valley.

However, just as a conventional engineering solution to Sun Valley's problems appeared imminent, a sea change occurred in County policy. The sustainable principles espoused by TreePeople's T.R.E.E.S. (Trans-agency Resources for Environmental and Economic Sustainability) Project had gained some high-level converts at Public Works. The cooperative strategy of T.R.E.E.S. seemed to hold great promise for cost-effective watershed management projects, and initial contacts with the community indicated that residents were willing to participate in an alternative scenario. The County has tabled its plans for a storm drain and now favors an area-wide retrofit in accordance with watershed Best Management Practices (BMPs).

In this vision, local and regional stakeholders would pool their resources and retrofit the watershed with retention basins, cisterns, strategic tree-planting, permeable pavement, groundwater infiltrators and other BMPs. A successful demonstration project at this scale would constitute a milestone in watershed management and could be expected to draw international attention. Widespread emulation of the project would lead to reductions in demand for imported water throughout the southwestern United States.

New Protocols Meet CALFED Solution Principles

The watershed management protocols proposed for Sun Valley will help eliminate flooding, promote conservation and reduce demand for water imports from the Bay-Delta, capture water, green the community, increase recreational opportunities, create jobs and improve the quality of life for residents. They can also point the way to water demand reductions in other parts of the County through widespread implementation of the BMPs. And they meet CALFED's six solution principles—the protocols will be equitable, affordable, durable and implementable, will reduce conflicts among water users, and will not redirect significant negative impacts.

Los Angeles County's support is conditioned upon the recruitment of, and funding from, other agencies and groups with watershed management responsibilities and concerns. A group of

stakeholders, TreePeople (with 300 Sun Valley members) among them, has been meeting regularly for two years; a community outreach program is in its early stages.

TreePeople is seeking $350,000 from CALFED to widen and deepen the outreach program and fund educational programs that will teach the broader ecological principles of water conservation through local schools, civic organizations, churches and businesses. The materials and techniques we develop for Sun Valley will stress integrated, sustainable watershed management and interregional connections. They will be replicable for use in other watersheds, both in California and nationwide.

Sun Valley Watershed Stewardship

Twenty-eight years of grassroots public outreach have taught TreePeople that change is possible in a community only when its members have an investment in the process and the outcome. What CALFED calls "watershed stewardship" is not an inherent individual skill, but a learned group process. As a first step in building the requisite sense of community ownership, the Sun Valley Watershed Stakeholders Group was formed late in 1998 to examine the chronic flooding and devise solutions in accord with sustainable principles and "socially and politically in concert with local needs and desires." (CALFED Watershed Program Plan, Section 2-1) For the first time, government agencies, civic groups, non-profit organizations and private enterprises—the stakeholders—are working together to solve related problems they've previously tackled independently.

The Group—currently numbering 40 representatives from 18 organizations and interest groups—meets once a month to explore ideas and proposals, implement short-term solutions to flood-related problems, and plan public education and outreach activities. Leaders from across Los Angeles work in harmony to overcome bureaucratic roadblocks, apportion costs and benefits, and find funding for both short-term solutions and the long-range watershed retrofit.

The Group's overall watershed retrofit plan was first presented to the public for review in August 2000. L.A. County Department of Public Works Deputy Director Carl Blum and TreePeople President Andy Lipkis presented a vision of a greener and more sustainable Sun Valley, where stormwater would be transformed from liability to resource. The community's positive response encouraged the stakeholders and added considerable momentum to their work.

Two recent products of the Group's work, implemented in January 2001, exemplify the stakeholder process and its potential. Flooding along Sun Valley Middle School's Bakman Avenue drop-off area was making it difficult for kids to reach the classroom without getting soaked. Vulcan Materials, a Stakeholder Group member that quarries sand and gravel in the area, donated materials and labor to construct a new driveway at the school.

Because other area schools were losing attendance-based state funding—kids couldn't get across flooded streets and stay dry, so they stayed home—Group member and Los Angeles Unified School District Board member David Tokofsky authorized and facilitated a shuttle service that would get the kids to school and recover enough of that funding to pay for itself.

In March, TreePeople began publishing *Watershed Events* for the Group. The quarterly newsletter, with text in English and Spanish, will inform residents of the project's progress and encourage their involvement. CALFED funds will help TreePeople expand its role as a facilitator of the stakeholder process, intensify the community outreach effort, and develop a bilingual

public education program that will operate through schools, civic organizations, churches and businesses. Together, the stakeholder process and behavior-changing education can help Sun Valley pioneer flood control and water conservation measures.

The desired outcomes of our stakeholder work in Sun Valley, and the associated outreach and public education campaign, are the raising of public awareness of the environmental and fiscal issues underlying watershed management decisions, and the generation of solid public support for the retrofit plan. Direct contact with every resident of the watershed is the key to achieving those outcomes.

We anticipate that these Phase One activities will take two years. They will set the stage for a watershed retrofit costing between 100 and 200 million dollars, and producing $500 million in benefits, according to preliminary cost/benefit analysis.

TreePeople & the T.R.E.E.S. Project

Question Two: Qualifications, organizational structure and experience

TreePeople has been doing community outreach and public education work since its founding in 1973. By 1984, the non-profit volunteer-based group had inspired the 3.5 million people of Los Angeles to plant a million trees for the Summer Olympics. In 1990, founder Andy Lipkis published *The Simple Act of Planting a Tree*, a book he co-authored with his wife, Kate. The book has sold 40,000 copies and helped spark the citizen forestry movement in this country and around the world. TreePeople's urban forestry programs reach into neighborhoods throughout Los Angeles, serving and inspiring thousands of residents every year.

Since 1973, TreePeople has been one of the primary sources of environmental education for almost two million Los Angeles school children, using an ecosystem-based approach tailored to Los Angeles' ethnically diverse student base, and following the learning techniques outlined in Howard Gardner's *Theory of Multiple Intelligences*.

TreePeople has been contracted to conduct environmental education on behalf of the City of Los Angeles Bureau of Engineering's Stormwater Management Division; Department of Water and Power; and the County's Department of Public Works. We have developed, tested and implemented various watershed curricula, and consulted with Adopt-A-Watershed and San Diego’s Daedalus Education Foundation on the development of their curriculum for an urban environment.

TreePeople's work for the County Department of Public Works—the Generation Earth program—is one of the most successful environmental education programs in the country. Generation Earth uses a multimedia approach that challenges secondary school students to examine their role in the urban ecosystem and works with them to create lasting change. By the end of the 1999-2000 school year, Generation Earth had made over two million contacts with Los Angeles County teenagers. One hundred thousand of those teenagers participated in projects that measurably improved the environmental health of their neighborhoods.

TreePeople also acts as the Los Angeles County regional coordinator for CREEC (California Regional Environmental Education Community), the California Department of Education-sponsored network that provides educators with resources for enhancing environmental literacy among California students.

TreePeople has more than 16,000 members served by a staff of 51, and works with an average of 7,000 volunteers in the course of a year. The group's annual budget is $4,500,000, of which $350,000 comes from grant and foundation funding and $1.8 million from government contracts with state, county and local agencies. TreePeople has a fully staffed accounting department with broad experience in contract administration. Chief Operating Officer Richard Wegman oversees the department and acts as the organization's fiscal watchdog.

The T.R.E.E.S. Project

The Sun Valley Watershed Retrofit Project is a perfect opportunity for the T.R.E.E.S. Project to demonstrate, at the watershed level, how Best Management Practices work to sustain a community. T.R.E.E.S. was initiated by TreePeople to address the lack of integration in Los Angeles-area environmental problem solving, and to demonstrate the enormous economic, environmental and social benefits to be derived from a cooperative approach to designing and maintaining our urban landscape.

TreePeople's partners in its T.R.E.E.S. project include: USDA Forest Service/National Urban and Community Forestry Advisory Council; the City of Los Angeles (Stormwater Management Division of the Department of Public Works, Department of Water and Power, Department of Environmental Affairs, Board of Public Works and Bureau of Sanitation); the City of Santa Monica (Environmental and Public Works Management Department and Community and Cultural Services Department); the United States Environmental Protection Agency, Region 9; the Los Angeles County Department of Public Works; the Metropolitan Water District of Southern California; the Los Angeles Urban Resources Partnership; the Natural Resources Conservation Service; the Southern California Association of Governments; Environment Now; the L.A. Unified School District; the ARCO Foundation; the Angelica Foundation; and the Global Environmental Project Institute.

In order to prove the desirability and feasibility of achieving an integrated approach to the management of the urban watershed, T.R.E.E.S. goals are to:

- Redesign individual urban sites to function as small-scale watersheds
- Demonstrate that the designs perform as intended
- Make evident the economic viability of this approach
- Bring together key agencies and other stakeholders to plan the financing and implementation of large-scale watershed retrofitting

In concert with these goals, it is TreePeople's vision, in its public outreach program to be funded by CALFED, to accomplish the following in the Sun Valley watershed:

- Use outreach and education to increase environmental literacy in every household
- Catalyze and support a network of neighborhood stewards to create an environmentally sustainable neighborhood vision
- Support families as they evaluate their properties, prescribe changes, and implement BMPs

The T.R.E.E.S. Charrette

TreePeople has extensive experience meeting both its organizational goals and those of the T.R.E.E.S. Project. The first T.R.E.E.S. goal, redesigning urban sites to function as miniature urban forest watersheds, inspired a 1997 design conference, or charrette, that brought together some of the nation's foremost landscape and building architects, engineers, hydrologists, urban foresters, government officials and community leaders. They worked intensively for three days to redesign an assortment of sites, addressing the area's environmental concerns: wasteful use of potable water; stop-gap flood control policies; water pollution from storm runoff; costly water importation and the desertification of exporting areas; high rates of energy consumption for cooling; large amounts of green waste using up landfill space; urban blight and its destabilizing consequences; and youth unemployment. The challenges presented to the designers of each site included reducing the use of imported water by 50 percent; capturing, retaining and reusing water from a 100-year flood; and eliminating polluted runoff from the site.

The charrette process yielded a collection of designs capable of addressing all of these issues at once by retrofitting each residential, industrial, commercial and public property to function as an individual watershed. But the participants also came away with a new inspiration—we can indeed achieve sustainability, beautify our environment and employ citizens as its caretakers. And ultimately, it can all be done at less than the cost of implementing the current piecemeal strategies that fight nature's cycles instead of working with them.

Since the charrette, T.R.E.E.S. Project partners have helped redesign four sites in Los Angeles—a single-family home, two schools, and a public parking lot. Details of some of these projects can be found in our answers to Questions Four and Five. The Sun Valley Watershed Retrofit will be the first opportunity to demonstrate many of these design principles and BMPs across an entire local watershed, and should demonstrate their feasibility to other municipalities and agencies throughout California, helping to alleviate demand on Bay-Delta water resources.

The Budget

Question Three: Budget cost sheet, basis for determination of costs, cost-effectiveness of proposed activities

As CALFED recognizes in its Program Plan, "watershed management…includes such diverse issues as land use decision making, parcel management techniques, restoration and enhancement projects, monitoring, and educational programs." (Watershed Program Plan, Section 1-7)

The attached budget reflects TreePeople's projected expenditures for a cost-effective, multi-faceted campaign that will help the residents of Sun Valley manage their watershed. The indicated task completion dates reflect a range for the completion of subtasks (e.g., school education programs, community meetings, etc.). The final month in the range is the estimated completion date for the entire task. The campaign involves research, school education, community outreach and information exchange, a media outreach component, professionally designed outreach materials, an adaptation of our unique Watershed Runoff model to evaluate neighborhood solutions, expansion of the watershed group to include representatives from every agency with stakeholder interest, and efforts to streamline bureaucratic processes to allow quick implementation of community BMPs.

TreePeople will combine its existing education materials and curricula with new materials. The resulting fully documented package will be made available to community organizations and public agencies to assist them in organizing and educating their diverse constituencies to take an active role in watershed improvement. The public record of the Sun Valley Watershed Stakeholders Group, and the step-by-step processes through which the Group came to decisions and fulfilled its objectives, will also be made available to other organizations so they don't have to start from scratch.

(TreePeople agrees to the Terms and Conditions in Section 8 of the Full Proposal Guidelines, with the following exception to Item 5, Rights in Data: TreePeople will retain all rights to materials developed prior to receipt of any CALFED funds.)

Twenty-eight years of experience in creating successful public education programs provide the basis for an accurate estimate of the cost of developing this model education program in Sun Valley. In light of its expected widespread use in California and beyond, the program's cost is low—other communities will reap the benefits of our experience, thereby increasing the cost-effectiveness of our efforts.

Our project's focus on thoroughgoing community outreach and stakeholder participation in the problem-solving process also increases its cost-effectiveness in a less measurable way. The funds we are requesting would constitute a substantial up-front investment, but they will ensure that project implementation occurs at a rapid pace, and with minimal added cost from delays associated with community and political resistance. Further, the work will result in the highest possible level of public participation in the roll out and maintenance of BMPs in the watershed.

Anticipated funding from CALFED comprises 39% of the current budget. We expect our outreach and education activities in Sun Valley to continue with an expanded local funding base. More and more partners are expressing interest in the project.

The billing rates in the budget are based on current rates and anticipated increases by year's end, plus 18% for taxes and benefits. Staff positions for the project, salary rates and estimated hours are delineated in the attached chart. TreePeople's employee compensation packages are competitive with those of other non-profit organizations of its size (51 employees).

TreePeople has several other large education contracts—with the City of Los Angeles Department of Water and Power, the Los Angeles County Department of Public Works, and the City's Stormwater Management Division. Our budget calculations are based on 9 years of experience administering contracts of this type.

Because this portion of the Sun Valley Watershed Retrofit Project does not involve land acquisition, construction or changes to existing land use, our proposal is not subject to the requirements of CEQA or NEPA. We have, therefore, not included costs for environmental compliance in the budget we are submitting.

It is TreePeople's belief that the highest ratio of benefits to cost will be attainable when the agencies that manage the waste stream and control energy, water and air resources integrate their efforts, and communities are fully involved in the watershed management decisions affecting them. Our aim in Sun Valley is to create the sustainable city in microcosm—a pilot project that

can really make a difference. The cost-effectiveness of our outreach and education work can ultimately best be measured against the benefits of adopting a sustainable approach on a metropolitan or regional scale.

Public Education—"Software" for the Watershed

Question Four: Project feasibility, successful similar projects, new knowledge & techniques, maintenance of product

The grant we seek is not for the construction of demonstration projects, but for public outreach and education to promote broad-scale adoption of water conservation BMPs in Sun Valley, which is part of CALFED's Southern California service area. In this answer, we explain the public education plan and its benefits (for sake of an analogy, let's call it *software*), and then briefly describe the demonstration projects (think of them as *hardware*) as examples of successfully implemented community work that began with TreePeople outreach and public education. The end result of our proposal, a public education plan, is a focused two-year effort that will not require additional funding from CALFED. But the community, the stakeholders and TreePeople will reevaluate the situation and the need as the retrofit project moves forward. At that point, it may be determined that some form of institutionalized public watershed education is necessary and possible, and funding sources within and outside the community will be sought.

TreePeople's efforts will be informed by the successful public education and outreach efforts of the California Tahoe Conservancy, an independent state agency since 1984, which is known for its comprehensive and participatory planning processes. Our participation in watershed groups such as the California Urban Water Conservation Council and the Los Angeles and San Gabriel Rivers Watershed Council keeps us current with developments in the field and provides a vehicle for sharing our activities with a larger audience.

The Sun Valley Difference

In Sun Valley, we are training the water conservation spotlight on an *urban* watershed. We expect to show that even an economically disadvantaged community can contribute to the restoration of its environment, and that the work will result in profound conservation of natural resources. We will define the structure and ground rules of the stakeholder process, so they can be easily replicated elsewhere. We will create a graphic record of each action or decision in the Sun Valley process so that each new stakeholder can quickly be brought up to speed.

TreePeople has about 16,000 members in the Los Angeles area. We will mobilize our 300 Sun Valley members to assist with community outreach and education, and to influence political leaders. Other outreach activities will include: seeking endorsements and support from other community activist organizations; educating religious leaders to gain their support and leverage their influence; opening lines of communication with the business community, which is vocal on the flooding issue; and conducting a series of public meetings to hear concerns, present possible solutions, and develop an implementation plan that reflects community needs and desires.

Our education department will develop activity plans for the area’s schools that emphasize how the acts of individuals and groups ripple throughout the environment. Students will be led to an understanding of their place in nature through lessons on the water cycle and the intricacies of the California water supply—how much is there, how much do we actually need, how much do we use, where does it come from, what happens to it when we’re finished with it? At least two of the area’s campuses are prospective sites for more extensive retrofits. At these schools, the

education program will also help students assess and manage their campuses as sustainable watersheds. Our objective is to reach every schoolchild in the Sun Valley watershed.

Campuses are focal points of our proposal because of their size, their role in transmitting information to the community, and the possibilities they present for enhancing study and play for children. Other area schools will also be promoted as sites to demonstrate the potential benefits of a wider-scale watershed retrofit. The materials developed for use in the schools will be adapted to increase family awareness of and community support for implementation. With representatives from the local City Council offices, County supervisor's office, and the school board, we will work to unify the community and its leadership.

Representatives of TreePeople and the other stakeholders will attend meetings of local organizations to present outreach and education materials. We intend to make presentations to every community organization we can identify. We will also take community leaders on tours of sites with working BMPs, such as TreePeople's Hall House demonstration site and Broadous Elementary School in Pacoima (see below).

Though their construction is not a part of this proposal, planning for demonstration projects is. As part of our work with the Stakeholders Group, and with community participation, we will help identify and select sites for a small number of pilot retrofit projects within the Sun Valley Watershed.

TreePeople will expand its current working relationships with local water agencies, the Los Angeles Department of Water and Power and the Metropolitan Water District among them, to identify and seek solutions to institutional and regulatory barriers. Regular stakeholder committee meetings are also crucial to the success of this project; TreePeople will continue to organize and facilitate them with the goal of creating systems and policies that will form an integrated plan for urban watershed management.

We will also publish a bilingual newsletter, establish a project website, and develop community signage to publicize the project and increase watershed awareness (e.g., "You are now entering the Sun Valley Watershed").

The T.R.E.E.S. Project has installed a variety of watershed BMPs at the sites described below. Learning about the site designs and how the BMPs function will help the Sun Valley community make decisions about its own watershed retrofit.

The Hall House—South Central Los Angeles

Hall House, a private single-family residence, was the first to be built of five sites planned at the T.R.E.E.S. charrette. It has been retrofitted to capture and retain onsite the runoff from a 100-year storm event, which is then used in dry months to irrigate the property. Yard waste is also retained on the property as mulch, eliminating the need for transport to and space in a landfill. The watershed BMPs employed at the site include: a roofwater first-flush unit; a cistern collection system; a vegetated and mulched swale; retention grading in the front and back yards; and a driveway drywell.

As a working example of retrofits suitable for adoption across Los Angeles and in similar ecosystems, the Hall House site has generated considerable publicity since it was developed. The

T.R.E.E.S. website (http://www.treepeople.org/trees) contains interactive educational materials that can help people plan similar BMPs for single-family residences. TreePeople has also published brochures and education materials, and leads tours of the site for watershed management professionals, students and interested citizens.

Hillary T. Broadous Elementary School—Pacoima

Pacoima's Broadous Elementary School, in the watershed adjacent to Sun Valley, is one of two Sustainable School projects based on the T.R.E.E.S. BMPs. Funded by the Department of Water and Power's Cool Schools program and with the support of the school district, the site has been retrofitted to capture, treat and hold all the rain falling there, eliminating the flood risk and recharging the groundwater. Underground infiltration systems, swales, permeable ground cover, and strategic tree planting will replace over 30 percent of the asphalt. Energy use will be reduced 18 percent by shading and cooling the buildings and their air conditioning units. TreePeople supervised the installation of the in-ground BMPs, finishing the work in March 2001.

The Open Charter School—Westchester

The other Sustainable School project, Open Charter, was funded by County Proposition A (Safe Neighborhood Parks Act), and financed by the City Bureau of Sanitation's Stormwater Management Division. TreePeople installed an integrated set of BMPs at the site. The project is complete but for the installation, expected in 2001, of a cistern designed by the environmental engineering firm, Montgomery Watson. It will store 460,000 gallons of captured stormwater for reuse in irrigation. The impetus for this project was the need to reduce polluted runoff, but the multiple benefits of watershed BMPs are made evident at sites like this one. Installed in sufficient numbers across the L.A. basin, such cisterns will also help control flooding and significantly reduce local demand for water imports from the Bay-Delta.

Monitoring and Adaptive Management

Question Five: Performance measures, coordinating with other efforts, monitoring and local decision-making

As we have already stated, our proposal deals with public education, not with research or construction. Questions regarding monitoring programs and protocols or data collection and analysis are probably unanswerable for a project of this type. Nonetheless, to address the intent of CALFED's questions and to ensure the effectiveness of our efforts, we recognize the need for objective assessment of the proposed activities. TreePeople will do a baseline analysis of the level of awareness among adults and schoolchildren of watershed issues, and will do a second survey when the public education initiative is completed. This type of analysis has been an important component of the Generation Earth program developed and administered for L.A. County Public Works by TreePeople.

In its Generation Earth Program, TreePeople works with the California Department of Education, the Los Angeles County Office of Education, and the UCLA Graduate School of Education to evaluate program materials for their educational effectiveness, going beyond standard protocols.

Once educational materials have been prepared, they undergo extensive assessment. TreePeople staff members review the materials in detail against California Department of Education standards, and additional experts are consulted on an as-needed basis to evaluate the effectiveness of new programs.

After the materials have been used in the field, UCLA's Graduate School of Education formally assesses whether students learn and how many of the predetermined learning objectives are met. This assessment is performed independently of TreePeople's educators to ensure an unbiased evaluation. Testing tools include before and after written tests, observation of student behavior, interviews and application exercises.

TreePeople expects to use similar Adaptive Management techniques (collecting feedback, plugging in new information, course-correcting) to guide our efforts as our outreach to watershed stakeholders continues, and will particularly monitor bilingual materials to ensure that the Spanish translations are accurate and that technical terms are clearly understood by the target audience.

A Unique Cost/Benefit Analysis

TreePeople has already created a new monitoring method as part of the T.R.E.E.S Project—a unique cost/benefit analysis computer program that collects data to help urban planners evaluate the socioeconomic and natural resource consequences of implementing urban forestry BMPs in the Los Angeles area. Such evaluations will be useful to local and regional decision makers, as well as the interested public, to ensure that reasonable consideration is given to the T.R.E.E.S. BMPs as alternatives to conventional design strategies. The cost/benefit analysis was designed to:

- Produce reliable information regarding a wide range of cost-effective BMPs with significant potential to improve the environment and generate nonmonetary social benefits;
- Support agency participation in, and funding of, multi-purpose watershed projects that meet agency objectives as well as those of the larger stakeholders group;
- Describe the effects of BMP implementation on a wide range of environmental and socioeconomic conditions including water availability and quality, flood control, air quality, energy demand, greenwaste supply, capital and operational costs, social benefits, and employment;
- Use the best existing information to the maximum possible extent; and
- Provide a blueprint for a geographic information system (GIS) interface computer model to allow users to select study areas ranging from a single census block to all of Los Angeles County.

The data and equations from the analysis provided the framework for the T.R.E.E.S. cost/benefit computer model. The model has been an important tool in persuading potential stakeholders to come to the table, and will continue to inform the planning process for sustainability-driven watershed retrofits such as Sun Valley’s. It will be available to the Sun Valley stakeholders as they evaluate and suggest BMPs for the watershed.

Technical Monitoring

We recognize the need for hard data on the costs, benefits and efficacy of the watershed management BMPs we advocate. That need is being met at TreePeople’s Hall House demonstration site by the USDA Forest Service. In cooperation with TreePeople, the Forest Service’s Western Center for Urban Forest Research and Education (UC Davis) recently

completed the installation of equipment—at the demonstration site and at a control site next door—to record weather information and monitor the performance of the BMPs. A data logger collects information from the weather station at the retrofitted property and from flow meters on both lots. From there, the data travels via remote phone link to the Center in Davis.

Planning is currently underway for monitoring of the BMPs recently installed by TreePeople at the Broadous school site in Pacoima. The plans are part of a 10-partner Water Augmentation Study coordinated by the Los Angeles and San Gabriel Rivers Watershed Council and sanctioned by the Upper Los Angeles River Area Watermaster. To measure the water quality improvements effected by the stormwater separator and infiltration field at the school, monitoring wells will be installed both upstream and downstream of the BMPs.

Another cooperative monitoring effort, this one for the BMPs at the Open Charter School demonstration project, is also in the planning stage. TreePeople, the L.A. Unified School District and the City of Los Angeles' Bureau of Sanitation will study the performance of the cistern and its water quality implications. The data gathered at these sites will be instrumental in the continuing effort to prove the feasibility of sustainable watershed management and to encourage stakeholders to integrate their management activities. By publicizing and exchanging information about similar installations in Sun Valley, we will encourage the monitoring of those sites as well as their emulation elsewhere.

Hard Science and Watershed Assessment

Question Six: Scientific basis for activities, assessment of watershed conditions, supporting and/or resulting baseline knowledge

The activities we are proposing here build on TreePeople's unique mix of skills in outreach, education and project facilitation. Providing the scientific basis for the Sun Valley Watershed Retrofit Project has been the work of the Los Angeles County Department of Public Works. In a recently completed 2-year feasibility study for the project, the Department determined that the approximately 2100 acre-feet of stormwater that pass through the watershed each year could be retained there using any of several combinations of watershed BMPs. Some of that amount would recharge the groundwater, and some would become available for reuse in landscape irrigation.

The study first compiled a list of accepted Best Management Practices and water retention technologies. There were seven of these—drywells, cisterns, infiltrators, retention basins, retention grading, porous pavement and infiltration pits—most of them being studied for use at residential, commercial and industrial sites. Department engineers, assisted by the LA City Bureau of Engineering and the firm of Montgomery Watson, defined performance specifications for the BMP's. County engineers determined the infiltration rates for soils at various locations in the study area's eight subsidiary basins. The study included the calculation for each BMP of the cost per cubic foot of stormwater retained and ranked the BMPs according to cost-effectiveness.

Based on the County's study and BMP sizing estimates from TreePeople's Watershed Runoff model, Montgomery Watson engineers prepared an Opinion of Probable Construction Cost (OPCC) for a variety of solutions to the Sun Valley flooding problem.

The current vision for the Sun Valley watershed features a similar mix of large- and small-scale retrofits of residential, commercial and industrial properties. Wherever possible, the retrofits will serve multiple purposes—parks that double as detention basins (as does the County's Pan Pacific Park in Los Angeles), school playing fields underlain by groundwater recharge facilities, cisterns that conserve water and help control flooding, porous pavement that allows infiltration and cools heat-island parking lots. These construction projects will be augmented by community and homeowner actions such as planting trees, reusing greenwaste as mulch, building residential berms and constructing vegetated swales.

Our experience in environmental education is the basis for our conviction that a properly designed program can have a tremendous impact on behavior. Information on issues and alternatives can turn an individual's visceral environmental awareness into consciousness and action. In 1988, TreePeople began helping the City of Los Angeles prepare for the imposition of mandatory recycling by developing a recycling component for the Elementary Education curriculum. During the next three years, tens of thousands of schoolchildren learned about home recycling and shared the information with their families. The subsequent roll out of curbside recycling in Los Angeles was successful beyond anyone's expectations. The City reported participation rates as high as 90% and cooperation remains high to date. Similar projects nationwide that lacked a public education component have typically reached participation levels of only 20-30%.

While the level of public awareness and concern on environmental issues varies with time and circumstances, recent events in California are conspiring to raise those levels to new heights. Power shortages, energy costs and generation/pollution trade-offs are in the forefront today, but similarly complex water issues are never very far in the background. It may already be too late to forestall serious water supply and quality problems in California and the West, but it's never too late to try. The best time to plant a tree was twenty years ago. The second best time is now.

Sun Valley & the Bay-Delta Program

Question Seven: Addressing CALFED objectives, connecting watershed processes and watershed management

CALFED states six solution principles that guide it in developing program alternatives. Proposed solutions should be:

Affordable—An affordable solution will be one that can be implemented and maintained within the foreseeable resources of the CALFED Bay-Delta Program and stakeholders. One premise of a coordinated inter-agency approach to managing the Sun Valley watershed is its potential for leveraging projected infrastructure spending. Individually, stakeholder agencies already have responsibilities in the watershed. In cooperation, they can increase benefits without increasing expenditures.

Equitable—An equitable solution will focus on resolving problems in all problem areas. Improvements for some problems will not be made without corresponding improvements for other problems. An integrated approach to watershed management in Sun Valley will help solve a variety of environmental, economic and social problems.

Implementable—An implementable solution will have broad public acceptance, legal feasibility and will be timely and relatively simple compared with other alternatives. Much of the technology we're promoting for Sun Valley is simple and low-tech. Its installation would be far less disruptive to the community than that of a major engineering solution such as a storm drain. That consideration was one impetus for the County's decision to build the Pan Pacific Park detention basin in Los Angeles.

Durable—A durable solution will have political and economic staying power and will sustain the resources it was designed to protect and enhance. The storm drain planned for Sun Valley and now tabled was a single-purpose treatment of a symptom, the local flooding problem. It exemplified the traditional approach to flood control in the Los Angeles basin, which has required periodic massive investment to keep pace with development. A judicious mix of watershed BMPs will break that cycle, and cure the disease, in ways that conserve some resources and augment others. The outreach and education program will enhance our solution's political staying power.

Reduce Conflicts in the System—A solution will reduce major conflicts among beneficial users of water. The stakeholder process now brings the concerned parties together on a regular basis. Previously, they worked independently, even on problems that are closely related. The process *is* intended to reduce conflicts, but far more importantly, it also *produces* synergy.

No Significant Redirected Impacts—A solution will not solve problems in the Bay-Delta system by redirecting significant negative impacts. Another premise of the T.R.E.E.S. Project, on which the Sun Valley program is based, is the creation of multiple solutions and the elimination of redirected impacts. The Sun Valley retrofit is intended to retain stormwater runoff in the watershed, eliminating, rather than redirecting, such negative impacts as flooding and stormwater pollution. It will also reduce the solid waste stream (by mulching urban garden *waste*), reduce exposure to ultra-violet rays (by shading and greening schools, streets, and yards), decrease energy use and improve air quality (also by shading and cooling, thereby lowering demand for energy generation).

We believe that the Sun Valley Watershed Retrofit meets all six of CALFED's solution principles. Even better, the project will demonstrate that environmental justice and equity are available to all Californians, regardless of their economic or political clout. If an historically under-served area can turn itself into a cutting-edge demonstration project by storing and reusing rainwater, *any* California community can do so.

Water Supply—Of the four CALFED Bay-Delta Program objectives, the Sun Valley Project will most directly affect water supply concerns. Captured stormwater runoff would provide a significant portion of the water required for landscape irrigation, reducing the demand for imported Bay-Delta water. The education component, for which we are requesting funding, will foster awareness of the ever-increasing demand on California's decreasing water supply, engender a conservation ethic and create a demand for home conservation technology. The project is intended as a pilot for the retrofit of the entire Los Angeles basin, which will eventually reduce demand on a much larger scale.

Our education program will increase public awareness in Southern California of the area's dependence on imported water and thus its close links to and immediate impact on the Bay-Delta

and other areas of the state and the region. We will encourage an attitude of "By helping ourselves, we're helping our neighbors" among individuals and organizations in Sun Valley. By promoting the adoption of a mix of residential and commercial BMPs for watershed management in Sun Valley, we will create a model to be replicated in other urban watersheds throughout California.

Our outreach and educational materials will discuss the environmental problems facing the Bay-Delta and explain why they matter to Southern Californians. The materials will stress the interrelatedness of the two areas, the importance of maintaining water supply and quality in the Bay-Delta area, and the impacts of individual and local action on the environment as a whole. We will stress the development of watershed management practices that solve problems where they occur, rather than passing them downstream, or causing them upstream. We will provide the framework for local decisions that affect the Bay-Delta: do we build storm drains to redirect our ecological woes elsewhere, or do we install cisterns to capture and reuse stormwater and repair a disrupted hydrologic cycle?

We also want Sun Valley community members to help further interregional partnerships, both locally and in the Bay-Delta area, an important follow-up to the implementation phase. Our outreach and education programs will encourage the development of community leaders who can serve as role models for activists in other communities. Publicity generated by the project will reach all of Southern California, spreading the message and increasing interest and participation in watershed and conservation activities.

Water Quality—The quality of Bay-Delta water is degraded by urban runoff, one of the largest remaining sources of water pollution in our nation's streams, rivers and coastal waters.
The ultimate aim of the Sun Valley watershed project is the capture, treatment and reuse of all stormwater in the watershed. Success will mean a reduction in water pollution locally and the establishment of recognized BMPs that would be replicable throughout Southern California and in the Bay-Delta area. While Southern Californians do not directly pollute the Bay-Delta region, Best Management Practices developed and perfected here are exportable.

Levees—Just as high winter flows threaten the integrity of Delta levees, rainy-season flooding causes many problems in the Sun Valley community. We will meet our flood-control objectives there with an appropriate mix of Best Management Practices, a mix that would be equally applicable in the Bay-Delta's urbanized tributary areas and equally effective in reducing the threat to the levees.

Ecosystem Quality—Material on preserving species diversity and restoring wildlife habitat in disturbed areas will be an element of our educational effort. The proposed Sun Valley retrofit includes the creation of parks and open space and a significant increase in the number of trees. Each of these items, a benefit in itself, will also improve and expand wildlife habitat in the area. The downstream water quality benefits will also improve the ecological functioning of riparian and coastal waters and increase their ability to sustain populations of diverse plant and animal species.

TreePeople and Personal Responsibility

Question Eight: Other important aspects of the project

An important part of TreePeople's mission is to inspire the people of Los Angeles to take responsibility for their environment. Starting from this foundation of personal responsibility, we teach about the interrelationships among humans, their built world, and the natural environment. We teach the ecology of neighborhoods: that a neighborhood is part of a living system, the local environment is an essential part of our everyday life, and that every resident's daily decisions, choices and actions make a difference to the health of that system. We try to instill an integrated understanding of the issues so residents can make informed choices and willingly alter their habits and behaviors.

Given the right motivators and a *context* for taking environmental action, residents will accept personal responsibility. If they are shown how and where they fit, they become engines for change within a locus they can control—their neighborhood. The residents of Sun Valley already have a strong motivator, a flooding problem that complicates their lives each winter, and for which they need a solution.

But the imposition by decree of traditional, single-purpose solutions ignores the importance of raising the level of public environmental literacy. And no single-purpose engineering approach to flood control can address the fact that it's human presence and human behavior in the L.A. basin that make problems out of natural cycles.

For example, the pollution of our coastal waters is primarily an effect of land-based pollution. Urban runoff increases when too much land is paved and the barren soil that does remain exposed often will not absorb water. Green waste—yard trimmings currently sent to landfills—could be better used as mulch to hold rainwater, enrich the soil and nurture trees. Holding and reusing rainwater reduces runoff and also has the desirable effects of conserving potable water supplies and alleviating demand on the overtaxed Bay-Delta system.

In a small watershed like Sun Valley, the variety of smaller-scale Best Management Practices that a well-informed community requests will meet its needs more effectively than a major engineering solution imposed by government agencies. Those BMPs will also provide a wider range of benefits to the community—benefits that become effective sooner, last longer, and increase over time. Not the least of those benefits is community level economic development—specifically, the creation of jobs designing, building and maintaining structural BMPs and promoting non-structural ones. Ideally, demonstration projects on the scale of Sun Valley will inform state and local policies governing new construction. Then these practices will become truly cost-effective and widely implementable.

TreePeople and CALFED both believe in the necessity of community involvement in watershed management planning. As a 28-year-old non-profit organization with demonstrated community support and staying power, TreePeople is well suited to devote its resources to the development and realization of a long-term vision for Sun Valley. As a leader in environmental education in the state and in our region, TreePeople has a unique mix of skills and services to offer the community.

As a non-governmental organization free from the vicissitudes of politics, it is ideally situated to recruit stakeholders, facilitate communication among them and maintain momentum on projects.

As a seasoned environmental group, it is uniquely qualified to hold the vision, serve as a clearinghouse for information and engage in shuttle diplomacy among the interested parties.

TreePeople has worked for the past five years developing and presenting nationwide a cost/benefit model that demonstrates how a variety of watershed BMPs produce multiple long-term benefits that far outweigh the cost of their implementation. The model has been, and will continue to be, an important tool in persuading potential stakeholders to come to the table and ultimately, to fund retrofits aimed at improving watershed sustainability.

The programs for which we are requesting funds—outreach, education and the stakeholder process—represent half the pieces of a complex puzzle. The remaining pieces involve partnering with other stakeholders, including the L.A. County Department of Public Works, for the design and construction of BMPs on the watershed. The Department is concurrently submitting a proposal to CALFED for funding of the "hardware" involved in some of the Sun Valley demonstration projects.

Assembling these pieces in Sun Valley is an important step toward meeting the objectives of the CALFED Bay-Delta Program and establishing new principles of sustainable watershed management throughout the state.

Sun Valley 2-Year Budget Detail

	SunValley CALFED					
Task #	**SunValley - Task Descriptions**	**Completion Date**	**Matching Task Subtotal**	**CALFED Task Subtotal**	**Task Total**	**Budget %**
Task 1	**Research**	Months 1-12	$ 50,900	$ 4,997	$ 55,897	6%
a	Identify community issues					
b	Expand identification of organizations, leaders and opinion makers					
c	Assess community watershed literacy and favored BMPs					
d	Research public opinion to develop outreach strategy and message					
e	Identify infrastructure investments (and others) appropriate for watershed cost/benefit analysis					
f	Identify demonstration sites with recreation potential					
g	Literature and technology review					
	Task Products: Database of leaders and opinion makers; summary of literature and technology review; map of potential demonstrations sites					
	Success Criteria: Timely completion of outlined tasks; sound understanding of community issues to be addressed in developing education materials					
Task 2	**School Education Programs**	Months 3-20	$ 65,950	$ 117,420	$ 183,370	20%
a	Institute Schoolyard Explorer© and Watershed Activity Plan© in 12 area schools					
b	Help students at retrofit candidate schools prescribe solutions					
c	Educate school administrators on value of schools as models for sustainability					
d	Develop materials for home watershed assessment					
e	Develop replicable material elucidating Bay-Delta/SoCal connection					
f	Recruit & manage Green Teams at schools					
g	Implement professional development curriculum for					
	Task Products: Bay-Delta education materials; education delivery workplans; assessment reports					
	Success Criteria: Learning objectives met; targeted number of people reached; materials developed that are tested & proven to increase understanding of watershed management; positive outside evaluation of education techniques and materials.					

Sun Valley 2-Year Budget Detail

	SunValley CALFED					
Task #	**SunValley - Task Descriptions**	**Completion Date**	**Matching Task Subtotal**	**CALFED Task Subtotal**	**Task Total**	**Budget %**
Task 3	**Community Outreach and Information Sharing**	Months 2 -23	$ 108,165	$ 59,270	$ 167,435	19%
a	Meet with community leaders to identify needs and desires					
b	Conduct public education meetings on watershed management approaches, terminology and technology					
c	Solicit endorsements of retrofit from activist organizations					
d	Develop educational piece for org. members to encourage participation by and endorsements from their organizations					
e	Distribute educational piece					
f	Educate religious leaders to gain their support					
g	Meet with & seek support of civic groups					
h	Maintain contact with and encourage supportive community members					
l	Conduct general community meetings/forums					
j	Organize tours of BMP demonstration sites for community leaders					
k	Provide progress reports to officials and opinion leaders to retain their support					
l	Seek community help in identifying demonstration sites					
m	Teach Home Forester techniques to interested community members					
n	Recruit people to join in the stakeholder process					
	Task Products: Community meeting announcements; community meetings; educational pamphlet; tours; progress reports to community leaders; home forester seminars.					
	Success Criteria: Target number of community organizations endorsing and writing letters of support to water agencies and politicians requesting implementation of water conservation BMPs in their community; Stakeholder group expanded to contain at least one member of every affected agency, political body and community group in the watershed.					
Task 4	**Public Relations/Media Campaign**	Months 3 - 21	$ 166,450	$ 62,250	$ 228,700	25%
a	Gain editorial support through briefings of writers and					
b	Purchase project advertising aimed at community					
c	Create a press packet					
d	Target local radio stations and public access television					
e	Solicit letters to the editor from leaders and community groups					

Sun Valley 2-Year Budget Detail

	SunValley CALFED					
Task #	**SunValley - Task Descriptions**	**Completion Date**	**Matching Task Subtotal**	**CALFED Task Subtotal**	**Task Total**	**Budget %**
f	Conduct mass mailings to residences and businesses					
g	Develop interactive project web site					
h	Produce project newsletter					
l	Mail newsletter to community groups and individuals					
j	Post newsletter on website					
k	Distribute newsletter to media					
	Task Products: Print advertisements; press packet; public service announcements; mailings; quarterly newsletter; website					
	Success Criteria: Number of letters to editor published; number of hits on website; number of favorable news articles published about the project; number of public service announcements; number of newsletters requested & distributed; response to newsletter.					
Task 5	**Develop Graphics and consistent look for all published pieces**	Month 9	$ 5,050	$ 27,500	$ 32,550	4%
a	Develop professional quality graphics adaptable to various media					
	Task Product: Gallery of graphics					
	Success Criteria: Comprehensive materials readily available to adapt to changing needs in outreach and education					
Task 6	**Model Enhancement**	Month 6	$ 20,880	$ -	$ 20,880	2%
a	Enhance the Runoff Model (costs/benefits of added BMPs)					
b	Modify model to simplify changes to BMP specifications					
c	Calculate benefits associated with specific scenarios					
d	Refine model to use surface and/or subsurface infiltration rates					
	Task Products: Enhanced Watershed Runoff Model					
	Success Criteria: Runoff model more efficient at calculating a wider mix of BMPs; User feedback on ease of model use.					
Task 7	**Assemble Multi-Agency Stakeholders Task Force**	Months 1-24	$ 70,430	$ 23,109	$ 93,539	10%
a	Define stakeholder process structure and groundrules					
b	Research infrastructure agencies to identify key individuals					
c	Assemble a board of agency chiefs					

Sun Valley 2-Year Budget Detail

	SunValley CALFED					
Task #	SunValley - Task Descriptions	Completion Date	Matching Task Subtotal	CALFED Task Subtotal	Task Total	Budget %
d	Facilitate appointment of steering committee					
e	Participate on committee to direct Sun Valley project					
f	Find additional funding from member agencies for implementation planning					
g	Solidify project support among agency staff through public declarations by directors					
h	Maintain a public record of Stakeholders group					
	Task Products: Stakeholder groundrules; monthly stakeholder meetings; meeting minutes published and posted on website; board of agency chiefs; steering committee					
	Success Criteria: Number of agency heads on board; number of stakeholders in group; amount of funding for implementation planning;					
Task 8	**Policy, Planning and Design**	Months 6-24	$ 6,350	$ 10,420	$ 16,770	2%
a	Identify and address regulatory roadblocks to implementation					
b	Encourage necessary policy changes to allow BMP implementation					
	Task Products: Compilation of potential regulatory roadblocks; position paper recommending policy changes to facilitate implementation.					
	Success Criteria: Number of roadblocks identified and addressed; number of regulators reached and responding to recommendations.					
Task 9	**Project Management and Final Analysis**	Months 1-24	$ 55,825	$ 10,500	$ 66,325	7%
a	Oversee and coordinate execution of project elements					
b	Coordinate meeting schedules & public notification					
c	Supervise outreach staff, consultants & vendors					
d	Before & after polls of watershed literacy					
e	Final Report					
	Task Products: Pre- and post-education and outreach literacy polls; final report of results of two-year effort					
	Success Criteria: Timely completion of all project elements; substantial increase in public watershed literacy					
Task 10	**Contract Administration**	Months 1-24		$ 34,534	$ 34,534	4%
a	Oversee reporting requirements and contract billing					

Sun Valley 2-Year Budget Detail

	SunValley CALFED					
Task #	**SunValley - Task Descriptions**	**Completion Date**	**Matching Task Subtotal**	**CALFED Task Subtotal**	**Task Total**	**Budget %**
j	Audit and Personnel Administration					
c	Insurance costs					
	Task Products: Progress reports and invoices; backup materials; audit					
	Success Criteria: Monitoring compliance with contract provisions; compliance with OMB requirements					
	Totals		$ 550,000	$ 350,000	$ 900,000	
	Total Hours 14,428		**14,428**			

Sunvalley CalFed Budget

Task #	SunValley - TASK DESCRIPTIONS	Average Labor Rate	Hours	Total Labor	CalFed Supplies	CalFed Travel	CalFed Materials	CalFed Subcontractor Totals	Matching fund Matching fund	CalFed Cal Fed Requested Totals	GRAND Grand Totals
1	**Research**	$ 19.00	263	$ 4,997	$ -	$ -	$ -	$ -	$ 50,900	$ 4,997	$ 55,897
2	**School Education Programs**	$ 28.67	2,060	$ 58,420	$ 11,750	$ -	$ 34,500	$ 12,750	$ 65,950	$ 117,420	$ 183,370
3	**Community Outreach and Information Sharing**	$ 28.92	1,485	$ 40,770	$ 11,500	$ 3,000	$ 1,000	$ 3,000	$ 108,165	$ 59,270	$ 167,435
4	**Public Relations/Media Campaign**	$ -	-	$ -	$ 48,500	$ 1,000	$ -	$ 12,750	$ 166,450	$ 62,250	$ 228,700
5	**Develop Graphics and consistent look for all published pieces**	$ -	-	$ -	$ 5,000	$ -	$ -	$ 22,500	$ 5,050	$ 27,500	$ 32,550
6	**Model Enhancement**	$ -	-	$ -	$ -	$ -	$ -	$ -	$ 20,880	$ -	$ 20,880
7	**Assemble Multi-Agency Stakeholders Task Force**	$ 19.08	335	6,465	7,994	1,900	-	6,750	70,430	23,109	93,539
8	**Policy, Planning and Design**	$ 22.54	470	10,420	-	-	-	-	6,350	10,420	16,770
9	**Project Management**	$ 35.00	300	10,500	-	-	-	-	55,825	10,500	66,325
10	**Administration**	$ 27.46	886	$ 24,324				$ 10,210	$ -	$ 34,534	$ 34,534
	Totals	$ 25.81	5,799	$ 155,896	$ 84,744	$ 5,900	$ 35,500	$ 67,960	**$ 550,000**	**$ 350,000**	$ 900,000
	Grand Total										**$ 900,000**

Provide Benefits/salary percentage here 18%

Subcontractors average hourly rate estimated at $75

Supplies costs include printing and materials for newsletters and educational pieces.